

REMARKS

These remarks and the accompanying amendments are responsive to the Office Action mailed May 6, 2004 corresponding to the above-identified patent application (hereinafter referred to also as "the Office Action").

Section 2 of the Office Action

Section 2 of the Office Action rejects Claims 41-56 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. These claims are significantly rewritten herein by canceling Claims 41-56 and replacing them with new Claims 71-86. New claims 71-86 are written as method claims and use terms such as "first communication apparatus", "second communication apparatus", and so forth; instead of terms such as "another communication apparatus of self-node", "communication apparatus of other not", and so forth.

An example relationship between new claims 71-86 and the embodiments described in the specification will now be explained for clarity and to show enablement. The terms "first communication apparatus", "second communication apparatus", and "third communication apparatus" of new Claims 71-86 may, in one example, correspond to "apparatus 71", "apparatus 73 or 74", and "apparatus 72" in Figures 23-25, respectively. If the specification is read in this light considering this example relation, the undersigned respectfully submits that Claims 71-86 are clear and enabled by the specification such that one of ordinary skill in the art can make and/or use the invention recited in Claims 71-86 without undue experimentation. Furthermore, read in this light, the novelty and non-obviousness of new Claims 71-86 over the cited art becomes more apparent as will be explained in further detail below.

Section 4 of the Office Action

Section 4 of the Office Action rejects Claims 1-56 under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 1-56 are rewritten.

Specifically, as mentioned above, Claims 41-56 have been rewritten in the form of new Claims 71-86, which are clear for at least the reasons provided above.

Also, Claims 37- 40 are rewritten in the form of new Claims 65-70. New Claims 65-70 are written as method claims, and use terms such as "first communication apparatus", "second communication apparatus", and so forth. The undersigned respectfully submits that new Claims 65-70 are clear, especially when the specification is read in light of the example relationship as mentioned above with reference to new Claims 71-86.

Claims 1-36 are rewritten in the form of new Claims 57-64. The undersigned respectfully submits that new Claims 57-64 are clear due to the numerous rewordings presented in the new claims.

Section 6 of the Office Action

Section 6 of the Office Action rejects Claims 17-20 under 35 U.S.C. 101 as being directed towards non-statutory subject matter. Claims 17-20 are cancelled herein thereby rendering this rejection moot.

Sections 8, 11 and 12 of the Office Action

The old claims 1-56 have been rejected either under 35 U.S.C. 102(e) as being anticipated by United States patent number 5,978,386 issued to Hamalainen et al. (hereinafter referred to simply as "Hamalainen"), under 35 U.S.C. 103(a) as being unpatentable over Hamalainen, under 35 U.S.C. 103(a) as being unpatentable over United States patent number 5,666,362 over issue to Chen et al. (hereinafter referred to simply as "Chen"), or under 35 U.S.C.

103(a) as being unpatentable over Applicants Admitted Prior Art (hereinafter referred to as "AAPA") in view of either one of Hamalainen or United States patent number 6,438,137 issued to Turner et al. (hereinafter referred to simply as "Turner"). All of these rejections are rendered moot by the cancellation of Claims 1-56.

New Claims 57-64

A feature recited in new claims 57-64 is using improved frame configuration (for example, see Figure 3) instead of conventional frame configuration (see Figure 1). Specifically recited in each of new Claims 57-64 is that "additional information including information for identifying a frame partition" is used in the respective frame configuration. Further recited is that this information "includes a frame length". Hamalainen does not disclose these recited features of new Claims 57-64. Rather, Hamalainen discloses the use of a flag. Therefore, new Claims 57-64 are not anticipated by nor rendered obvious by Hamalainen.

New Claims 65-86

Old Claims 37-56 are rewritten in the form of new Claims 65-86. The new Claims 65-86 recited that the respective recited processing is performed "in a third communication apparatus located between a first communication apparatus and a second communication apparatus" or similarly "in a third communication apparatus located between a first communication apparatus of a first node and a second communication apparatus of a second node." This recitation is included in each of the independent Claims 65, 68, 71, 74, 77, 81 and 85. For example, new Claim 65 recites that in a third communication apparatus located between a first communication apparatus and a second communication apparatus, an LCP echo request transmitted by the first communication apparatus to the second communication apparatus is received, and an LCP echo reply to the first communication apparatus is transmitted. Neither the AAPA, Chen,

Hamalainen, nor Turner discloses this recited feature. Therefore, each of new Claims 65-86 are patentable over the cited art.

Accordingly, favorable action is respectfully requested. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 4th day of August, 2004.

Respectfully submitted,



ADRIAN J. LEE
Registration No. 42,785
Attorney for Applicant
Customer No. 022913

AJL:ds
DS0000002309V001